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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/673,762	09/29/2003	Leonid C. Lev	GP-302388	1466	
7590 05/09/2006			EXAMINER		
Kathryn A. Marra			TURNER, ARCHENE A		
General Motors	Corporation, Legal Staff				
300 Renaissance Center, Mail Code 482-C23-B21			ART UNIT	PAPER NUMBER	
P.O. Box 300			1775		
Detroit, MI 48265-3000			DATE MAILED: 05/09/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary Examiner		Application No.	Applicant(s)				
Archene Turner		10/673,762	LEV ET AL.				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of tem may be variable under the provisions of 32 CFE1.136(a), no avent, hewever, may a reply be timely filled # NO period for reply is specified above, the mediatum statutory period will exply and will expise SIX (5) MONTHS from the malting date of this communication. # Pallute prely whill his east cere calended period for reply—is by status, cause the application to become ABANDODE (33 U.S.C. § 113). Any reply received by the Office later than these mention after the malting date of this communication, even if timely filled, may reduce any seamer plants in an adjunction. # Pallute prely whill his east cere advantage and the prevailed prely will be prely to the communication, even if timely filled, may reduce any seamer plants in an adjunction. # Pallute prely willing heat cere advantage and the prelimination of the communication of the market in adjunction. # Pallute prely willing heat cere and the prelimination is non-final. # Pallute prely willing heat cere and the prelimination of the communication of the communication is non-final. # Pallute prely willing heat cere and the prelimination is non-final. # Pallute prely willing heat cere and the prelimination is non-final. # Pallute prely willing heat cere and the prelimination is non-final. # Pallute prely willing heat cere and the prelimination is non-final. # Pallute prely willing heat cere and the prelimination is non-final. # Pallute prely willing heat cere and the prelimination is non-final. # Pallute prely willing heat cere and the prelimination is non-final. # Pallute prely willing heat cere and the prelimination is non-final. # Pallute prely willing heat cere and the prelimination is non-final. # Pallute prely willing heat cere and the prelimination is n	Office Action Summary	Examiner	Art Unit				
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WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Edentations of time may be available under the proximes of 37 CR 1.13(a), in no even, however, may a raply be timely filed after 50 (b) MoNTh's from the mailing date of this communication. If No pends for raply is appended underly, the mailing date of this communication. If No pends for raply is appended underly, the mailing date of this communication. Any reply received by the Office later than these months after the mailing date of this communication. Any reply received by the Office later than these months after the mailing date of this communication, even if timely filed, may reduce any remark parts than adjustment. See 37 CR1 170(b). Status 1) □ Responsive to communication(s) filed on 22 February 2006. 2a) □ This action is FINAL. 2b) □ This action is non-final. 3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) □ Claim(s) 1-7.9.15-22 and 25-45 is/are pending in the application. 4a) Of the above claim(s) 27-41 is/are withdrawn from consideration. 5) □ Claim(s) 1-7.9.15-22 and 25-45 is/are rejected. 7) □ Claim(s) 1-7.9.15-22.25.26 and 42-45 is/are rejected. 10 □ The precification is objected to by the Examiner. 10 □ The drawing(s) filed on 1 is/are: a) □ accepted or b) □ objected to by the Examiner. Application Papers 9) □ The specification is objected to by the Examiner. 10 □ The drawing(s) filed on 1 is/are: a) □ accepted or b) □ objected to by the Examiner. Application Papers 9) □ The paper filed on 1 is/are: a) □ accepted or b) □ objected to by the Examiner. 10 □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
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		6) Other:					

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Art Unit: 1775

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 42-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Support in the original specification could not be found for more than one ceramic or metallic layer as claimed.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2,5,16,18,19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear where the third and alumina layer is located in relationship to the substrate, ceramic and metallic layers rendering the claims indefinite.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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Art Unit: 1775

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 6. Claims 1-7, 9-22,25,26 are rejected under 35 U.S.C. 102(b) as being anticipated by Dearnaley et al (6,087,025).
- 7. Claims 1-7, 9,15-22,25,26 are rejected under 35 U.S.C. 102(e) as being anticipated by Welty et al (6,904,935).
- 8. Applicant's arguments filed 2/22/06 have been fully considered but they are not persuasive. The applicant argues that the carbon coatings in Dearnaley et al or Welty are not the same as the claimed diamond coating. This is not found persuasive since the amount of crystallinity in the claim diamond has not been defined and thus it can include the diamond like coating in the references and thus the rejections stand.
- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1775

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-7, 9-22,25,26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drawl et al (4,992,028) in view of Dearnaley et al or Welty et al (as before).

Drawl et al discloses attaching a diamond or diamond like coating to a substrate through an interlayer. Drawl et al does not discloses the claimed interlayers.

Dearnaley et al or Welty et al discloses the known use of the claimed interlayers for carbon coatings.

Thus it would have been obvious to one of ordinary skill in the art to provide the claimed interlayers to attach the carbon coating of Draw et al to the substrate, as these interlayers as shown by Dearnaley et al or Welty et al to improve adherence.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Archene Turner whose new telephone number is (571) 272-1545. The examiner can normally be reached on Monday, Wednesday through Friday from 10:30 am. to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Please remember to include on the fax, the art unit 1775, serial number and Examiner's name.

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Art Unit: 1775

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

' 'A. A. Turner
Primary Examiner

Group 1700

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